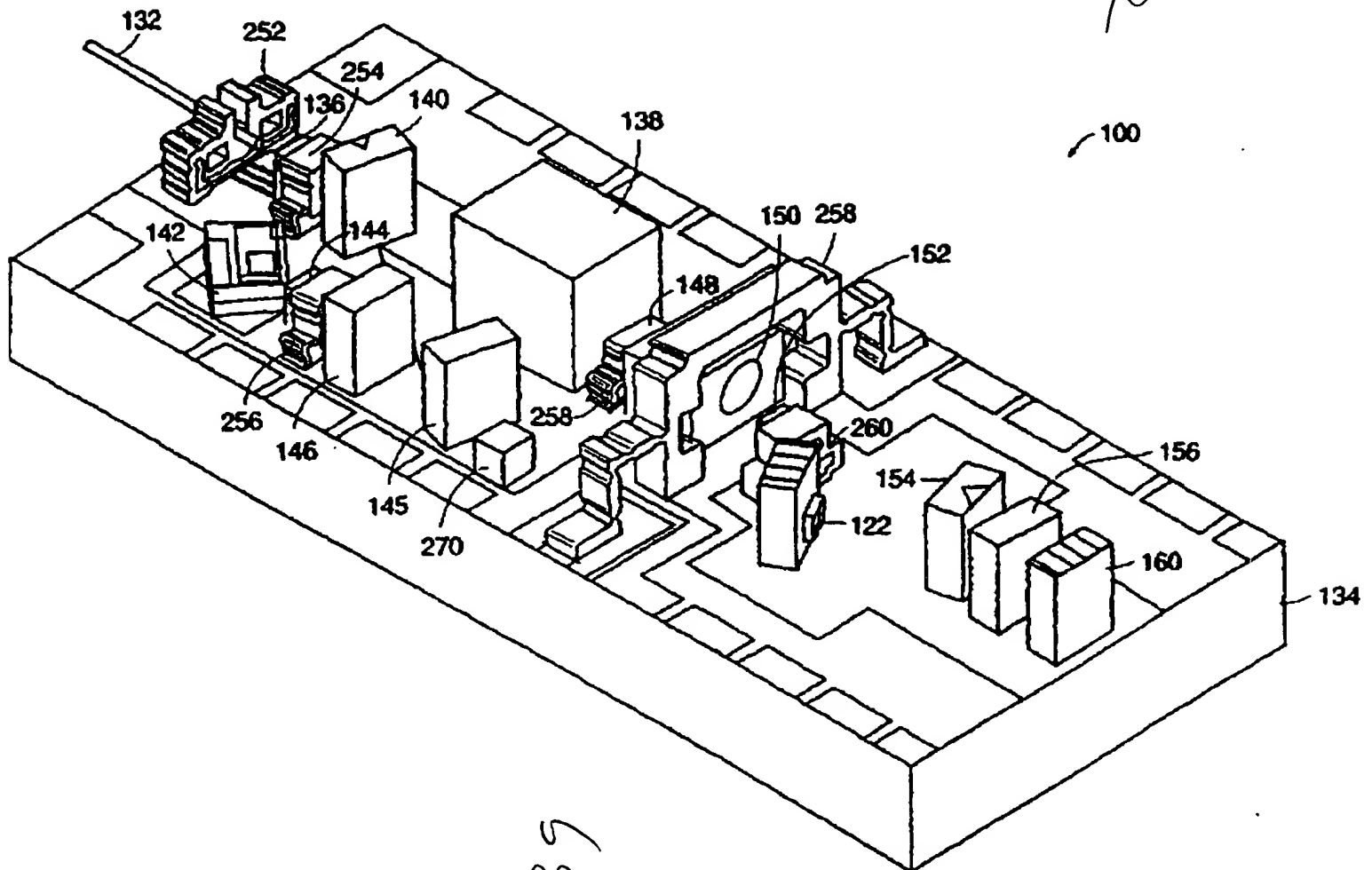


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made to
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5,321,539

DERWENT-ACC-NO: 2002-171294

DERWENT-WEEK: 200231

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TITLE: Integrated optical system monitoring system e.g. for wavelength division multiplexing (WDM) systems, consists of a hermetic package and an optical bench sealed within the package

INVENTOR-NAME: FLANDERS, D C; WHITNEY, P S

PRIORITY-DATA: 2000US-0648413 (August 25, 2000) , 2000US-186800P

(March 3,

2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
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WO 200165734	September 7, 2001	E	029	H04B 010/00
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A2	September 12, 2001	N/A	000	H04B 010/00
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AU 200160995 A

INT-CL_(IPC): H04B010/00

ABSTRACTED-PUB-NO: WO 200165734A

BASIC-ABSTRACT: NOVELTY - Integrated optical monitoring system comprises a

hermetic package and an optical bench sealed within the package. An optical fibre pigtail enters the package via a feed-through to connect to and terminate above the bench. A tunable filter is connected to the top of the bench and filters an optical signal transmitted by the fibre pigtail. A detector, also connected to the bench, detects the filtered signal from the tunable filter. Thus, the entire system is integrated together, on a single bench within a preferably small package. This configuration makes the system useful as a subsystem, for example, in a larger system offering higher levels of functionality and optical signal processing capability.

DETAILED DESCRIPTION - INDEPENDENT CLAIM is also included for the following:
method of constructing an integrated optical monitoring system.

USE - For wavelength division multiplexing (WDM) systems.

ADVANTAGE - Ensures proper guard bands are maintained between adjacent channels and also ensures that the carrier frequencies or wavelengths of the channels are correct both relative to other channels and relative to their wavelength assignments. Is capable of being integrated into a small package to be used as

a subsystem, or possibly even as a stand-alone system, in a WDM system, or other application requiring optical spectral monitoring.

DESCRIPTION OF DRAWING(S) - The diagram shows the integrated optical channel monitoring system.

Fibre 132

Optical bench 134

Tunable filter 150

----- KWIC -----

NRAN:
2002-171294

TIX:
Integrated optical system monitoring system e.g. for wavelength division multiplexing (WDM) systems, consists of a hermetic package and an optical bench sealed within the package

ABTX:
NOVELTY - Integrated optical monitoring system comprises a hermetic package and an optical bench sealed within the package. An optical fibre pigtail enters the package via a feed-through to connect to and terminate above the bench. A tunable filter is connected to the top of the bench and filters an optical signal transmitted by the fibre pigtail. A detector, also connected to the bench, detects the filtered signal from the tunable filter. Thus, the entire system is integrated together, on a single bench within a preferably small package. This configuration makes the system useful as a subsystem, for example, in a larger system offering higher levels of functionality and optical signal processing capability.

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ABTX:

DESCRIPTION OF DRAWING(S) - The diagram shows the integrated optical channel monitoring system.

ABTX:

Fibre 132

ABTX:

Tunable filter 150

TTX:

INTEGRATE OPTICAL SYSTEM MONITOR SYSTEM WAVELENGTH DIVIDE
MULTIPLEX WDM SYSTEM
CONSIST HERMETIC PACKAGE OPTICAL BENCH SEAL PACKAGE